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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | COMPINALATION NO |
|--|--------------------------------------|----------------------|---------------------|------------------|
| ATTLICATION NO. | FIGING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/541,752 | 02/07/2006 | Keiko Ikeda | 052777 | 3903 |
| 38834 WESTERMAN | 7590 09/17/200 J, HATTORI, DANIEL | | EXAMINER | |
| 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036 | | | STEADMAN, DAVID J | |
| | | | ART UNIT | PAPER NUMBER |
| | • | | 1656 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/17/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|---|--|--|--|
| | 10/541,752 | IKEDA, KEIKO | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | David J. Steadman | 1656 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATIO 16(a). In no event, however, may a reply be ti rill apply and will expire SIX (6) MONTHS fron cause the application to become ABANDON | N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 07 February 2006. | | | | | |
| 2a) This action is FINAL . 2b) ∑ This | a) ☐ This action is FINAL . 2b) ☒ This action is non-final. | | | | |
| | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) \boxtimes Claim(s) <u>1-9</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) 1-9 are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Ex | aminer. Note the attached Office | e Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | • | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of: | priority under 35 U.S.C. § 119(a | a)-(d) or (f). | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| des the attached detailed emice action for a list of the definica depice het received. | | | | | |
| | | | | | |
| | | | | | |
| Attachment(s) | 4) 🗖 Into-dam C | w (DTO 412) | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 💹 Interview Summar Paper No(s)/Mail [| Date | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal 6) Other: | Patent Application | | | |

Status of the Application

- [1] Claims 1-9 are pending in the application.
- [2] Applicant's preliminary amendment to the claims and specification, filed on 7/8/05, is acknowledged.
- [3] Receipt of an information disclosure statement, filed on 7/8/05, is acknowledged.
- [4] Receipt of a substitute Declaration under 37 CFR 1.63, filed on 2/7/06, is acknowledged.
- It is noted that the "immobilized enzyme" and the "target protein" in claim 9 are unrelated, *i.e.*, there is no recited association between the "immobilized enzyme" and the "target protein." For purposes of restriction, claim 9 has been interpreted as being drawn only to "an immobilized enzyme packed in a container" and the "wherein" clause does not further limit the "immobilized enzyme" or require its association with the "target protein" in any way.

Lack of Unity

[6] Lack of unity is required under 35 U.S.C. 121 and 372. This application contains the following inventions or goups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

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Group I, claim(s) 1-4 and 6-8, drawn to the special technical feature of a protein complex and a biosensor.

Group II, claim(s) 5, drawn to the special technial feature of a method for producing a protein complex.

Group III, claim(s) 9, drawn to the special technial feature of an immobilized enzyme packed in a container.

The technical feature linking the inventions of Groups I-III is a protein complex. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature for the following reason(s):

According to PCT Rule 13.2 unity of invention exists only when the shared same or corresponding special technical feature is a contribution over the prior art. The inventions listed as Groups I-III do not relate to a single general inventive concept because they lack the same or corresponding special technical feature. The technical feature of Group I is a protein complex and the technical feature of Group II is a method for producing a protein complex, which are shown by Ikeda et al. (*J. Virol.* 75:988-995, 2001; cited in the IDS filed on 7/8/05) to lack novelty or inventive step because the reference teaches a protein complex encompassed by claim 1 (see particularly the BmCPV polyhedrin-encapsulated GFP protein fused to BmVP3 at, *e.g.*, p. 994, column 1) and a method of making said protein complex, and thus the shared same or coresponding special technical feature of Groups I-II is not a contribution over the prior art.

- [8] Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- [9] Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Notice of Possible Rejoinder

[10] The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re*

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Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy. Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-272-0942. The examiner can normally be reached on Mon to Fri, 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> David J. Steadman, Ph.D. **Primary Examiner**

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